Guinea Pigs

Guinea Pig Facts

Scientific Name:	Cavia porcellus
Life Span:	4 – 6 years
Environment Temperature Range:	65F - 75F
Breeding Range:	3 –4 Months (male) -- 3-7 months (female)
Gestation Period:	63 – 70 days
Litter Size:	3 - 4 average
Weaning Age:	2-3 weeks

The guinea pig entered the research laboratory in the 18th century and has since made significant contributions to the scientific community. To this day, the guinea pig remains a favorite pet due to their docile behavior; ease of handling and clean, quiet nature.

Guinea pigs are found in an array of colors and coat types. Five primary varieties are encountered in the pet industry. The Shorthair or English is characterized by having a uniformly short hair coat. The Abyssinian has whorls or rosettes in their short, rough, wiry coat. The Peruvian is recognized by its very long, silky hair. These three types are most commonly kept as pets. The Silky and Teddy Bear varieties are encountered less frequently. The Silky is a large variety distinguished by its medium length silky hair. The Teddy Bear has medium length hair of normal consistency.

Diet and Handling

Diet

Good quality food and fresh, clean water must be readily available at all times. Fresh leafy greens and unlimited timothy hay are the most important parts of the diet. Adult guinea pigs should be limited to 1 tablespoon of pellets daily. Commercially available pelleted chows provide all the essential nutrients required by guinea pigs, as long as the pellets are fresh and wholesome when offered.

Do not feed rabbit pellets as a substitute for guinea pig pellets. They are not equivalent in nutritive value. Guinea pigs require a high level of folic acid and vitamin C. Guinea pig diets are uniquely formulated with these requirements in mind, whereas rabbit pellets are not.

Unlike most mammals, guinea pigs cannot manufacture their own vitamin C, therefore they must receive it from an outside source. Pelleted guinea pig diets are supplemented with this essential vitamin. However, even when properly stored in a cool, dry place, fresh pellets lose about one-half of the vitamin C content due to degradation within six weeks of manufacture. For this reason, we recommend additional vitamin C sources in the diet. The following supplemental foods are listed starting with the highest vitamin C content: turnip greens, mustard greens, dandelion greens, kale, parsley, collard greens, beet greens, strawberries, honeydew melon, spinach, raspberries, rutabaga, and oranges. Any change in the guinea pig's diet should be made gradually due to their sensitive digestive systems.

Guinea pigs tend to be creatures of habit, and therefore do not tolerate changes in the presentation of their food or water, nor changes in the taste, odor, texture or form of the food itself. Pet owners should avoid making radical changes in the food or water containers as well. Any sudden change in routine can result in the pet refusing its food and water, which can be disconcerting and ultimately dangerous.

All foods should be provided in heavy, ceramic crocks that resist both tipping and chewing. The crocks should be high enough to keep bedding and fecal pellets out of the food, but low enough for easy access by the animal.

Water is most easily made available by the use of a water bottle equipped with a "sipper" tube. Guinea pigs tend to contaminate and clog their water bottles by chewing on the end of the sipper tube and "backwashing" food particles into it. For this reason, it is imperative that all food and water containers be cleaned and disinfected daily.

Handling

Generally, guinea pigs are docile, non-aggressive animals. They rarely bite or scratch when handled. They usually voice their protest simply by letting out a high-pitched squeal. They may, however, struggle when being picked up or restrained. Extreme care should be taken not to injure them during handling. The guinea pig should be approached with both hands. One hand is placed under the guinea pig's chest and belly, while the other hand supports its hindquarters.

Housing and Breeding

Housing

Guinea pigs can be housed within enclosures made of wire, stainless steel, durable plastic, or glass. Wood should not be used due to difficulty in cleaning and susceptibility to destructive gnawing. The enclosure should have adequate ventilation, so be careful when using aquariums. The design and construction of the enclosure must be escape-proof. In addition, the cage must be free of sharp edges and other potential hazards. The size of the enclosure should allow for normal guinea pig activity. Approximately 100 square inches of floor area per adult guinea pig is recommended. The enclosure can remain opened on the top if the sides are at least 10 inches high, as long as other family pets such as dogs or cats are not a threat.

Cage flooring should be solid. Housing on wire over long periods of time often results in foot pad and hock infections from abrasive rubbing on fecal soiled wire. Broken legs are common in guinea pigs that fall through the wire mesh and panic to escape. Although solid flooring requires more effort to keep sanitary, it is safer for the guinea pig. Solid floor cages also tend to be more esthetically pleasing when appropriate bedding is used.

Bedding materials must be clean, nontoxic, absorbent, relatively dust free, and easy to replace.
Acceptable beddings are recycled paper products, shredded paper, processed ground corncob, and commercial pellets. Make sure the ground corncob is properly processed and stored to reduce fungal spore problems. Cedar shavings have been associated with causing respiratory difficulty and liver disease in some guinea pigs, so should not be used. Saw dust should also be avoided since it tends to accumulate within the external genitalia of male guinea pigs causing an impaction.

Because of their sensitive nature, guinea pigs are more comfortable and relaxed when housed in a quiet spot away from noise, excitement, and other such stresses. Be sure to select a location away from direct sunlight and avoid cold, damp areas.

Guinea pigs thrive in a dry, cool environment with adequate ventilation. Drastic environmental changes should be prevented, especially high temperatures and humidity. Since they are generally nocturnal (active at night), guinea pigs require quiet period to rest during the day.

Since guinea pigs are social creatures, more than one animal may be safely housed together provided the cage is big enough for two animals. In addition, males and females can remain in the same enclosure indefinitely if one or both has been fixed. Older, dominant animals may chew on the ears or hair of younger, weaker cage mates.

Breeding

The single most important consideration regarding guinea pig breeding is that the female guinea pig (sow) should be bred between four and seven months of age if she is to be bred at all. If the first breeding is delayed much beyond this time, serious and often fatal problems with delivery may result. The reason for this is that the pelvis of the guinea pig fuses at this early age, which narrows the birth canal, preventing the babies from passing easily.

Pregnancy lasts between 63 and 70 days. Pregnant sows exhibit a grossly enlarged abdomen during the later stages of pregnancy. Her body weight may actually double during pregnancy. The time of delivery is difficult to assess in guinea pigs due to the relatively long gestation period and lack of nest building by the sow.

Litter sizes range between one and six, with an average of three to four. First time litters are usually very small. Unfortunately, abortions and stillbirths are not uncommon with guinea pigs.

The young are very well developed at birth. They weigh between 50 and 100 grams and have a full hair coat. Babies are even born with teeth and with their eyes opened. The young can actually eat solid food and drink from a bowl shortly after birth, but it is recommended to allow them to nurse for three weeks before weaning.

Non-Infectious Conditions

Slobbers (Dental Malocclusion)

Slobbers is the condition where the fur under the jaw and down the neck remains wet from the constant drooling of saliva. The primary cause for this condition is overgrowth of the guinea pig's cheek teeth. Most often this occurs in older (2-3 years of age) guinea pigs and usually involves the premolars (the most forward positioned cheek teeth).

The overgrowth is usually due to improper alignment of the teeth when chewing. The overgrown tooth causes injury to the guinea pig's tongue resulting in an inability to chew and swallow food, drooling down the chin and neck, and weight loss (often severe). A veterinarian must be consulted as soon as this condition is suspected. The diagnosis is confirmed by visual examination of the mouth. Correction of the problem involves trimming or filing of the overgrown teeth, usually requiring general anesthesia. Dental work in the mouth of a guinea pig is difficult due to the extremely small mouth opening. A correction of the diet may also be in order. There is no permanent solution or correction to this problem. Periodic trimming or filing of the teeth is usually necessary.

Scurvy (Vitamin C Deficiency)

As discussed in the section on DIET, guinea pigs cannot manufacture vitamin C and must receive an adequate supply from outside food sources. Lack of sufficient vitamin C in the diet results in scurvy. The symptoms of scurvy include poor appetite, swollen, painful joints and ribs, reluctance to move, poor bone and teeth development, and spontaneous bleeding. If left untreated, this disease can be fatal, especially to rapidly growing young and pregnant females. In addition, vitamin deficiencies often predispose animals to other diseases.

Contact a veterinarian at the first sign of this condition for early diagnosis and treatment. These animals must be treated early with supplemental vitamin C (given by mouth or by injection) in order to reverse the symptoms.

Barbering (Hair Chewing)

Hair loss is a common problem in guinea pigs. "Barbering" is just one of the many causes of it. This bad habit occurs when guinea pigs chew on the hair coats of other guinea pigs that are lower then them in the social "pecking order". There is no treatment for this condition except separating the guinea pigs if it becomes a serious problem.

Hair loss or hair thinning can occur for a number of other reasons as well. Certain fungal diseases and external parasite infestations also cause hair loss problems. These specific problems will be addressed in later sections.

Heat Stress (Stroke)

Guinea pigs are very susceptible to heat stroke, particularly those that are overweight and/or heavily furred. Environmental temperatures above 85F, high humidity (above 70%), inadequate shade and ventilation, overcrowding, and other stresses are predisposing problems.

Signs of heat stroke include panting, slobbering, weakness, reluctance to move, convulsions, and death. This is a treatable condition if recognized early. Heat stressed guinea pigs should be misted with cool water and placed in front of a fan or air conditioning vent. Once this first aid measure is accomplished, veterinary assistance should be sought.

Prevention of heat stroke involves providing adequate shade and proper ventilation. In addition, a cool misting with water and/or a fan operating over a container of ice can be directed toward the pet's cage. Air conditioning during the heat of the summer provides the best relief.

Disease Conditions

Pneumonia

Pneumonia is one of the most common bacterial diseases of the pet guinea pig. Respiratory infections are caused by a number of viral and bacterial agents. Conditions of stress, inadequate diet, and improper husbandry will often predispose a pet to an infection. Signs of pneumonia may include dyspnea (difficulty breathing), discharge from the nose and eyes, lethargy, and decreased appetite. In some cases, sudden death will occur without any of these signs. Occasionally, middle or inner ear infections accompany respiratory disease in guinea pigs. Additional signs in these cases include incoordination, torticollis (twisting of the neck), circling to one side, or rolling.

Veterinary consultation should be sought when a guinea pig exhibits any of the above signs. A bacterial culture with antibiotic sensitivity of the throat and/or nasal discharge may be needed to assist the veterinarian in the selection of an appropriate antibiotic. Aggressive antibiotic therapy and supportive care may be necessary to get the condition under control.

Bacterial Enteritis (Intestinal Infection)

A number of bacteria are capable of causing infections of the gastrointestinal tract in guinea pigs. Some of these bacteria are introduced through contaminated greens or vegetables or in contaminated water. One of the most common bacteria that causes intestinal disease in guinea pigs is Salmonella. In addition to diarrhea, other common signs associated with intestinal disease are lethargy and weight loss. In some cases, however, sudden death may occur before expression of these signs.

A veterinarian may elect to use aggressive antibiotic therapy and supportive care to treat this condition.

Bacterial Pododermatitis (Food Pad Infection)

Severe infections of the footpads are very common among guinea pigs housed in cages with wire flooring. Fecal soiling of the wire potentiates the problem. The guinea pig's front feet are most vulnerable to this condition.

Signs of this condition include swelling of the affected feet, lameness, and reluctance to move. Improved sanitation and cage floor alterations are the initial steps in correcting the problem. In addition, a veterinarian may treat the feet directly. Topical antibiotics and bandaging are often required. Depending on the severity of the damage, inject able antibiotics may also be necessary. Therapy may have to be carried out for a lengthy period of time to get full recovery. Unfortunately, a consequence of this condition is arthritis.

External Parasites (Lice and Mites)

Lice and mites are the most common external parasites of guinea pigs. Guinea pig lice and mites are not known to parasitize man.

Mites are microscopic, spider-like organisms that infest the top layers of the skin in affected animals. Mite infestations are usually more severe than lice. A specific mite, Trixacarus cavie, causes serious infestations in pet guinea pigs. This sarcoptic mite lives in the outer layers of skin causing an intense itching and scratching with considerable hair loss. In some cases, guinea pigs aren't itchy, and only show hair loss and crusting of the skin. In other cases, the infestation and irritation is so severe that the pet causes significant self-inflicted wounds and exhibits wild running and circling behavior. A veterinarian can diagnose this mite infestation by performing skin scrapings of affected areas and viewing them under the microscope. Successful treatment consists of one to four injections of a specific antiparasitic drug.

Transmission of mites can occur only through direct contact between infested and non-infested guinea pigs. Therefore, pet guinea pigs are not likely to harbor this parasite unless they are recent additions to the home or have had previous exposure to mite-infested guinea pigs. For your pet's sake, be sure that any guinea pig he/she comes in contact with is healthy and free of this and other parasites.

Lice are tiny, wingless, flattened insects that live within the hair coats of infested animals. Both adults and eggs are found attached to hair shafts of affected pets. Lice infestations often go unnoticed. However, heavy infestations are usually accompanied with excessive itching, scratching, and some hair loss. Scabbing on or around the ears may also be evident. Guineas pigs have two types of biting lice that may parasitize them. Both irritate and abrade the skin's surface and feed off the bodily fluids that exude through the superficial wounds they create.

A veterinarian can confirm the diagnosis of lice infestation by examination of the hair coat as well as microscopic examination of hairs from affected animals. As with mites, lice transmission occurs through direct contact with infested guinea pigs.

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Guinea Pig Sensitivity to Certain Antibiotics

Guinea pigs are very sensitive to certain classes of antibiotics. For this reason, NEVER attempt treatment of your pet guinea pig at home without prior consultation with a veterinarian. Many antibiotics that are safe for other animals have been shown to be lethal to guinea pigs, whether given orally or by injection. In addition, even some topical antibiotics can produce serious detrimental results.

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